terra firme forest about 15 m up, perched on a large horizontal bough. This represents a range extension southwest along the Rio Madeira of c. 550 km. It was to be expected; Snow (1982, *The Cotingas*) noted that the apparent absence of the species from Bolivia and southeastern Peru was probably due to insufficient collecting in these countries' lowland forests.

## PURPLE-THROATED COTINGA Porphyrolaema porphyrolaema

I observed and tape-recorded Purple-throated Cotingas on six different days; all records involved male birds. The nearest known locality is about 200 km northeast at Fazenda Rancho Grande, near Ariquemes (10°17′S, 62°52′W). Although this species has not yet been recorded in nearby Bolivia, Ridgely & Tudor (1994; *The Birds of South America*, Vol. 2) note that it should occur in the extreme northwest. These records indicate that it will probably also be found to occur in northeastern Bolivia.

## POMPADOUR COTINGA Xipholena punicea

I saw an adult male on 21 April and a female-plumaged bird on the 23rd, and heard another on the 24th. There are very few records of this species from the State of Rondonia and only one locality known from nearby northeastern Bolivia (Ridgely & Tudor, *loc.cit.*).

Conjunto Acariquara, Rua Samaumas 214, Manaus, Amazonas, 69085-410, Brazil. ANDREW WHITTAKER

25 July 1995

## A NOVEL FORAGING ASSOCIATION BETWEEN SOUTHERN RIVER OTTERS $LUTRA\ LONGICAUDIS$ AND GREAT EGRETS $CASMERODIUS\ ALBUS$

The association between Cattle Egrets *Bubulcus ibis* and foraging ungulates is well documented and has been subject to detailed investigation (Burger & Gochfeld 1982, *Behaviour* 79: 212–229). A record also exists of an association between a foraging Black Bear and a Cattle Egret (Smith 1985, *Wilson Bull*. 97: 395). However I can find no record in the literature of an association between an egret and an otter. Egret associations are typically terrestrial; for example Cattle Egrets following large terrestrial mammals through vegetation and preying on small organisms flushed from cover.

I report here a foraging association between a Southern River Otter Lutra longicaudis and a Great Egret Casmerodius albus, observed on four separate occasions at Aviarios del Caribe Nature Reserve, Costa Rica. The only recorded associations between birds and otters in the literature are predation by otters on birds (Vanwagenen et al., 1981, J. Mammalogy 62: 433–434) and scavenging by otters and herons on salmon carcasses (Hewson 1994, J. Zool. 235: 53–65). The commensal

association described below is therefore novel.

The Aviarios del Caribe reserve is located in the Rio Estrella estuary, on the Caribbean coast of Costa Rica. It contains a system of canals and lagoons supporting abundant fish life. The observations reported here were made between 2 and 20 July 1995. Great Egrets were a common sight feeding along the water margins, whilst otters were sighted

regularly in the deeper parts of the canals.

It was observed that upon the arrival of an otter in the vicinity of the Great Egret, rather than avoiding the disturbance, the egret walked or flew to an area of shallows immediately adjacent to the foraging otter. The egret then took several prey in rapid succession presumably because small fish had been driven into the shallows by the activity of the otter. On one occasion as the otter moved down the canal the egret followed: this continued for approximately 200 m. I estimate that the egret's success rate was much higher at these times than when stalking prey alone in the shallows.

It is possible that both otter and egret were independently tracking a moving shoal of fish; but considering the egret's primary attraction to disturbed water caused by the otter, this seems unlikely. It was not clear whether the four observations of this phenomenon were of different Great Egrets, or whether the same individual was responsible.

These observations are interpreted as a learned association between the specific disturbance produced by a feeding otter and a local abundance of food. Other disturbances, such as canoe traffic or human weed-cutting, rapidly disturbed egrets, causing them to take flight. This suggests that disturbance *per se* was not attractive to egrets. Commensalism with otters may be a widespread but, until now, unrecorded foraging technique used by the Great Egret.

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